

WHAT IS CLAIMED IS:

1. An image processing apparatus, comprising:  
a receiving unit to receive an image;  
an edge detecting unit to detect an edge using a lightness component  
of said received image;  
5 a selecting unit to select a specific one of said detected edges; and  
a correcting unit to correct the lightness component of said selected  
specific edge.

2. The image processing apparatus according to claim 1, further  
comprising an extracting unit to extract an original included in said image,  
wherein

said selecting unit selects the edge continuously extending from a  
first end to a second end of said extracted original.

3. The image processing apparatus according to claim 1, further  
comprising a converting unit to convert said received image into a lightness  
image including the lightness component and a color difference image  
including a color difference component, wherein

said edge detecting unit detects the edge from said converted  
lightness image, and

said selecting unit selects the edge detected from said lightness  
image and undetected from said color difference image as the specific edge.

4. The image processing apparatus according to claim 1, further  
comprising an attribute detecting unit to detect attributes of two regions  
separated by the edge detected by said edge detecting unit, wherein

said selecting unit selects said detected edge as the specific edge  
when said detected attributes of said two regions are identical to each other.

5. The image processing apparatus according to claim 1, further  
comprising a background luminance value calculating unit to calculate a

background luminance value of said received image, wherein

- 5       said selecting unit selects said detected edge as the specific edge  
when a difference between the background luminance values of two regions  
each at a prescribed distance in opposite directions from said detected edge  
is smaller than a prescribed value.

6. A computer readable recording medium recording an image  
processing program to cause a computer to execute the steps of:

- 5       receiving an image picked up from an original;  
detecting an edge using a lightness component of said received  
image;  
selecting a specific one of said detected edges; and  
correcting the lightness component of said selected specific edge.

7. The computer readable recording medium recording the image  
processing program according to claim 6, wherein said selecting step  
includes the step of selecting the edge continuously extending from a first  
end to a second end of the original included in said image.

8. The computer readable recording medium recording the image  
processing program according to claim 6, further comprising the step of  
converting said received image into a lightness image including the  
lightness component and a color difference image including a color  
5       difference component, wherein

      said edge detecting step includes the step of detecting the edge from  
said converted lightness image, and

- 10       said selecting step includes the step of selecting the edge detected  
from said lightness image and undetected from said color difference image  
as the specific edge.

9. The computer readable recording medium recording the image  
processing program according to claim 6, further comprising the step of  
detecting attributes of two regions separated by the edge detected by said

edge detecting step, wherein

5       said selecting step includes the step of selecting said detected edge as the specific edge when said detected attributes in said two regions are identical to each other.

10. The computer readable recording medium recording the image processing program according to claim 6, further comprising the step of calculating a background luminance value of said received image, wherein

5       said selecting step includes the step of selecting said detected edge as the specific edge when a difference of the background luminance values of two regions each at a prescribed distance in opposite directions from said detected edge is smaller than a prescribed value.

11. An image processing method, comprising the steps of:  
receiving an image picked up from an original;  
detecting an edge using a lightness component of said received  
image;

5       selecting a specific one of said detected edges; and  
correcting the lightness component of said selected specific edge.

12. The image processing method according to claim 11, wherein said selecting step includes the step of selecting the edge continuously extending from a first end to a second end of the original included in said image.

13. An image processing apparatus, comprising:  
an acquiring unit to acquire an image signal indicating an original  
image;

5       an edge detecting unit to detect an edge in a lightness image primarily representing lightness of the original image as a lightness edge;

      a fold edge selecting unit to select one of said detected lightness edges that connects an edge corresponding to an end of an original with an edge corresponding to another end of the original as a fold edge resulting

from a fold of the original; and

- 10        a processing unit to process said image signal in a portion of the original image corresponding to the fold edge, to eliminate an effect attributable to the fold of the original on the original image.

14. An image processing apparatus, comprising:

an acquiring unit to acquire an image signal expressing a color original image with three components;

- 5        a color space converting unit to perform coordinate transformation of the image signal such that the color original image is expressed by a lightness component primarily representing lightness and another component; and

- 10        a correcting unit to correct the lightness component in a portion of the color original image that is detected as an edge portion in a lightness image including the lightness component and is undetected as the edge portion in a color difference image including the another component, so that the relevant portion is undetected as the edge portion in the lightness image.

15. An image processing apparatus, comprising:

an acquiring unit to acquire an image signal indicating an original image;

- 5        an edge detecting unit to detect an edge in a lightness image primarily representing lightness of the original image as a lightness edge; and

- 10        a correcting unit to correct a lightness component in a portion of the original image detected as the lightness edge when a difference in the lightness between portions of the original image each at a prescribed distance from the lightness edge on its respective sides is smaller than a prescribed threshold value, so that the relevant portion is undetected as the edge in the lightness image.

16. An image processing apparatus, comprising:

an acquiring unit to acquire an image signal indicating an original

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